By Green Electricity Buying Co-op
House Judiciary Hearing 3/26/07

EXHIBIT 3
3/26/07
337

SB 337 BILL EXPLAINED (2/25/07 draft)

This legislation helps Montanans compete in the new energy economy. It gives green electricity buying cooperatives, composed of everyday Montanans, the right to own electrical generating and transmission equipment and to lease Montana ranch land to place that equipment on. Such equipment ownership is required for one to issue zero interest bonds created under bi-partisan legislation that was part of the 2005 Energy Policy Act. The co-op issued bonds are not backed by any government agency. So in what is called asset-based financing, the co-op must own the green electricity generating equipment in order to be able to pledge it as security for the bonds.

Montana's Green Electricity Buying Cooperative (GEBCO) has received Internal Revenue Service authorization to issue $31.7 million in zero interest bonds to build two wind farms. GEBCO's funding application said that if it received bond issuance authorization, GEBCO would seek to change Montana law so it and future green electricity buying co-ops could own electric generation and transmission equipment to satisfy the federal bonding authorization requirements.

This legislation allows Montana's green electricity buying cooperatives to produce electricity from wind and other Montana-based alternative energy sources. That may give farm families the income they need to hold onto their land and to reinvigorate their small towns.

THIS LEGISLATION changes Montana law to allow green electricity buying cooperatives to:

- Own generating and transmission equipment;
- Produce fuels as part of programs to provide firming power or transportation;
- Provide heat as well as power to more efficiently use recent technology;
- Lease property for conservation and renewable energy projects; and
- Create exit and reentry tariffs to protect existing utility customers.

WITH THIS LEGISLATION, Montana's legislators will be helping to create:

MORE JOBS, INCREASED LOCAL TAX BASE, AND REDUCED FARM ENERGY COSTS

- $16 million in windmill construction for Yellowstone County (NW of Billings)
- $15.7 million in windmill construction for McCone County (20 miles south of Fort Peck)

CLEAN MONTANA ENERGY BY AND FOR MONTANANS

- Enough electricity to service about 6000 families
- Allows customers of investor-owned utilities a choice to buy non-fossil fuel generated power and receive eventual cost benefits from having done so
- Keeps Montana money spent on energy in Montana, stimulating our economy

HELPS MAKE AMERICA ENERGY INDEPENDENT

- Begins building infrastructure for Montana's farms to provide electricity to fuel future development of hydrogen, ethanol, biodiesel and other transportation fuels

WITHOUT THIS LEGISLATION, Montana will lose:

- $31.7 million in bond authorizations that will then be reassigned to other states
- The legal basis for green electricity buying co-ops to compete for future bonds

THIS LEGISLATION:

- Does not affect rural electric cooperative customers
- Will not, under proper tariffs, create a price increase for investor owned utility customers who continue to be supplied with fossil fuel generated electricity
- Does not encumber any state or local bonding authority

More at http://www.greenelectricitybuyingcoop.org

Original signed and on letterhead:

February 8, 2007

Senator Greg Lind, Chairman
Senate Natural Resources and Energy Committee
Montana Senate
PO Box 200500
Helena, MT 59620-0500

Dear Chairman Lind and Members of the Natural Resources & Energy Committee:

The Yellowstone County Commissioners would like to go on record in support of SB337, sponsored by Senator David Wanzenried, with the amendments currently supported by the Yellowstone Valley Electric Coop in Yellowstone County.

This is a project that will be built in Yellowstone County and produce over a dozen jobs in construction of the windmills and generate $125,000. a year in new tax revenue.

Thank you for your consideration.

Sincerely,

_____
James E. Reno, Chair

_____
Bill Kennedy, Member

_____
John Ostlund, Member

BOCC/ptb

CASCADE COUNTY

February 9, 2007

Sen. David Wanzenried
Via FAX 406-444-4875

RE: Support for SB 337

Dear Senator Wanzenried,

Thanks you for being an advocate for Community based wind development in Montana. As you know, Montana hosts two large scale wind developments, the 130 MW park at Judith Gap and the 9 MW park adjacent to the Great Falls International Airport. The former project is out of state investor owned, with the federal tax credits benefiting said company. The latter project is a community scale project, owned by a Montana business, that has captured the federal tax credits, and added revenues.

Small scale projects are good for Montana. The cost of the project is within reach of people living within our communities. A host of benefits can be captured by these Montanans. In the case of the United Materials wind park, the company has become more efficient as a result of adding the wind part to its company mix. That is good news for our community because United Materials is our 24th largest taxpayer and employs 125 people. Additionally, the dispersal of small wind projects across Montana creates a natural firming scenario that policy should encourage.

You and your collogues have an opportunity to clear a path for small scale community based wind projects in Montana by supporting all measures that promote this dynamic. I encourage passage of SB 337 to allow the Green Electricity Buying Cooperative to advance its $31.7 million projects.

Sincerely,

Peggy Beltrone, Commissioner
pbeltrone@co.cascade.mt.us

Beartooth
RESOURCE CONSERVATION AND DEVELOPMENT AREA, INC.
PO Box 180, 604 West Front Street, Joliet, MT 59041 406-962-3914 FAX 406-962-3647

February 8, 2007

Senator David Wanzenried

Dear Senator,

I am writing to urge passage of SB337 on behalf of the five south-central counties represented by Beartooth RC&D Area, Inc.: Big Horn, Carbon, Yellowstone, Stillwater, and Sweet Grass. Our development organization has been working on educating our communities of the benefits of wind energy production for several years. We believe that these kinds of projects provide excellent opportunities for small communities to capitalize on one of our most bountiful resources.

Although Montana residents bear witness to this resource year in and out, we have been one of the last in the country to take advantage of it. We know that large developments like Judith Gap will continue to be erected across the state. However, we also encourage the smaller class of developments supported by the effort behind SB337. These size generally produce longer lasting results with greater cumulative benefits for our small, rural communities.

Thank you,

Marvin Carter
by Lisbeth Knutson

Marvin Carter
Vice Chairman

MCLINEY AND COMPANY
Investment bankers
Municipal Bonds

2800 McGee Trafficway
Kansas City, Missouri 64108

1(800) 432-4042
(816) 221-4042
Fax (816) 221-4048

February 7, 2007

Mr. Pat Dopler, President
Green Electricity Buying Cooperative

Via Email: russ@newworldwindpower.com
(No hard copy to follow)

Dear Pat:

McLiney And Company is pleased to see that the Montana legislators have been making progress with giving your organization the needed authority to own the collateral necessary to support your $31,700,000 Clean Renewable Energy Bond (CREBs) financing package.

The questions with regards to the funding of your CREBs are expected. Unfortunately, since not a single CREB has been financed, there is not an easy answer. One point that we discussed was that if market can not produce a viable funding package, the CREBs will not proceed.

We are hopeful that we will be able to create an energy funding tool that will allow us to take advantage of the our CREB allocation. There are numerous check points the CREB must pass before any funding will be secured. Among the most important are three:

1. Financial professionals must create the new type CREB finance mechanism. These professionals do not want to waste their time, energy, and money on non-viable projects. Once a method of funding has been established they'll get legal approval.
2. Bond Attorneys assist in ensuring the new CREB financing meets all state and local funding laws as well the federal regulations. Once a viable and legal debt instrument is in place, the bonds will be ready to be sold.
3. The CREBs must be sold in the bond market. It is our belief, because of the new, unique, nature of CREBs, these bond must be sold to institutional investors. Each institution will have additional requirements, including legal examinations and finance professionals to justify their purchase of the CREB.

The market is a remarkable governor of any security. Without a solid funding foundation, supported with a legal opinion, no CREB will ever be sold. If a solid funding mechanism is created, CREBs should become a very popular funding tool for new energy projects.

As you know, we are experts in a similar funding tool called Qualified Zone Academy Bonds (QZABs). QZABs experienced a very similar beginning. In fact, no QZAB was sold the first year this no interest school funding tool was available. Once we created, with the help of numerous bond attorneys, a solid vehicle, the QZAB became very successful school funding choice.

It is our intention to follow the same successful blue print for the CREBs that we were able to create for the QZAB.

If we can be of additional help or if you have any further question, please don't hesitate contacting me at anytime.

Sincerely,

G. Joseph McLiney
Principal

Dear Member of the Montana Legislature: (Provided by Green Energy Buying Cooperative, 3/24/07 draft)

Various questions have arisen about the Green Energy Buying Cooperative (GEBCO) that may or may not come up during the hearing on SB 337. We appreciated the opportunity to appear before you and hope the following will address those questions. We would be happy to address any other questions raised as well. Any support for GEBCO owning renewable electric generation that you feel comfortable giving would be appreciated.

Question	Answer
1) HB 330 will enhance the likelihood that counties can use zero interest bond funding they have obtained by creating revenue bond authority for counties. How does this relate to SF 337 and the GEBCO zero interest bond application?	▪ The SB 337 GEBCO zero interest bond application has nothing to do with the HB 330 Matney-Frantz Engineering city/county application for authority to issue zero interest bonds. ▪ The GEBCO proposal is not faced with the same problem regarding being able to use zero interest bond funding. Counties need the same authority to issue revenue bonds that cities have so they will not encumber their bonding limits and so they will not be on the hook in case of a default. HB 330 will help them get that revenue bonding authority. On the other hand, GEBCO has clear authority to issue bonds. It will be on the hook in case of a default--not a public entity. ▪ However, the issues are separate and require separate legislation. GEBCO's legislation is SB 337.
2) Why does GEBCO need legislation now?	▪ Currently, GEBCO cannot own energy infrastructure (wind, solar and biomass machines) even though it obtained $31.7 million in financing to build windmills. It does GEBCO and Montana no good if GEBCO has only part of the authority it needs to expedite the arrival of clean energy in Montana. ▪ Unless the window of opportunity closes, GEBCO can obtain Vestas windmills this year. That would save its customers $1 million needed to cover 25% (bridge financing) for down payments on windmills if it has to wait 2 years for equipment.
3) Does GEBCO need assurances from Bond Counsel?	▪ GEBCO has hired McLiney & Associates, Investment Bankers, the most experienced QZAB/CREBs advisers in the US, to advise it on CREBs issues. You may call Joe McLiney at (816) 221-4042 and he can refer you to his bond counsel at Dorsey & Whitney, Dan Semmers/Mae Nan Ellingson, if needed.
4) Who issues the bonds? And who is on the hook in the case of default?	▪ GEBCO issues the bond and owns the project until the bonding period is up. GEBCO and whoever purchases the bonds bear all risk. No public entity is at risk on these bonds. CREBs issued by GEBCO do not encumber public bonding limits or influence public entity bond ratings.
5) Who pays for the bonds?	▪ GEBCO. Our CREBS projects use asset-based financing. The windmill or solar collectors serve as the asset. Reasonable estimates can be made of how much energy a project will produce. Before bonds are issued methods of repaying the bonds are indicated in the financing agreements according to strict financial disclosure standards governing financial prospectuses. The 5% cost of the issuance comes from bond proceeds. If the bonds are not issued, there are no fees.

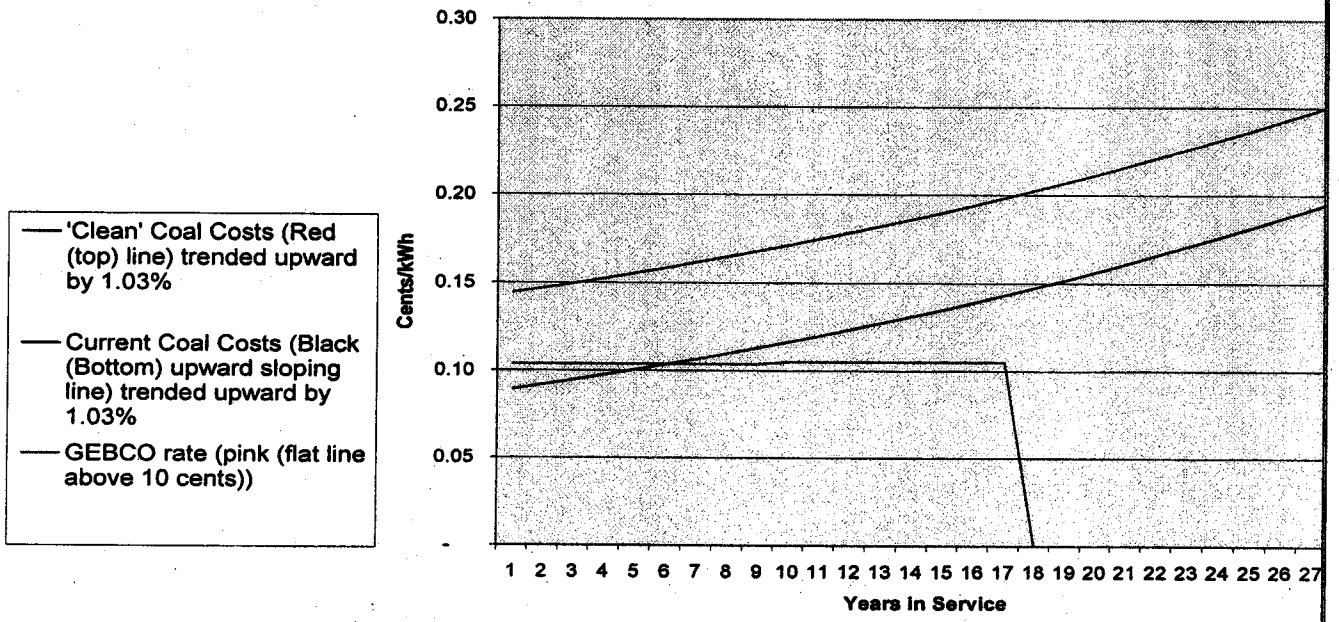
Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
6) Will the bonds sell?	▪ The bond market will determine that. This is a new type of issue. It took time for QZABs (zero interest school funding bonds) to catch on. However, GEBCO's Investment Bankers believe our bonds will sell.
7) Who buys the bonds?	▪ Anyone who can take advantage of the tax credits. It is likely that institutions will be the first investors.
8) GEBCO is just beginning to market to members. How will that affect bond sales?	▪ GEBCO's Investment Bankers indicate that they have placed bonds for communities with as few as 50 inhabitants. Bonds for a megawatt of wind will be sold for every 300 customers who sign up with GEBCO or who can be reasonably anticipated to sign up within a short time period.
9) If a customer decides to stop taking power from GEBCO may they?	▪ Of course. GEBCO by-laws allow a customer to stop being a member of the cooperative without penalty. Some legislative proposals are attempting to say that the monopoly does not have to take the customer back. If that becomes the case, GEBCO will negotiate agreements with other area cooperatives or producers for service. SB 337 was amended to require that upon request the PSC shall promulgate a re-entry tariff so existing customers of the monopoly are not harmed by the re-entry. However, upon additional review the code commissioner determined that amendment would not comply with the single subject rule in the title of SB 337. At present, 69-8-201(5) would allow the PSC to promulgate a reentry tariff. However, that provision is deleted in HB 25, which is working its way through the legislature. GEBCO intends to seek reentry and exit tariffs if law allows that.
10) What will this uncertainty in the size of GEBCO's customer base do to bond sales?	▪ The bond market will determine that. GEBCO's Investment Bankers indicate they have placed natural gas revenue bonds where the issuers do not have customers or a guarantee of customers.
11) Who would maintain and operate the windmills?	▪ O&M agreements will be in place in the GEBCO projects and the cost of those is already calculated into the spreadsheets on the projects.

Question	Answer
12) How would this affect existing customers who do not choose to take green energy?	▪ The effect should be minimal. In Colorado and elsewhere, the fact that some customers created the market for clean energy has brought the price of wind down to below the cost of conventional generation. Some of those windmills have gone into rate structures as the cheapest cost alternative, benefiting customers generally. Some of those windmills have remained dedicated to serve customers who signed up for green energy buying programs. In that case because the cost of providing black electrons has often exceeded the cost of providing green electrons, those green power customers are now paying less for energy during much of the year. ▪ A full discussion of this issue requires an examination of whether folks switching to renewables leave unrecovered costs on the system for others to pay. These are called embedded costs. Northwestern Energy does not have any embedded costs for generating plant because it chose to sell its generating plants by becoming mostly deregulated. So having folks switch to renewables on Northwestern's system does not raise a problem with embedded generation costs. There are none left. ▪ Embedded generation costs on MDU's system require a slightly different analysis. MDU has not had a general rate case since the 1980s. Much of its generating plant is becoming fully depreciated. That means there is very little embedded cost to worry about, certainly not any that existing customers can not easily defray. ▪ Also, there is no loss from embedded transmission costs because GEBCO will still have to pay to use Northwestern's or MDU's distribution lines, much in the same way that different phone companies settle up for completing calls from competing networks. ▪ To the extent that Northwestern has requirements contracts (where it only takes the energy it needs) there is no cost question either. You don't have to pay for what you don't take. ▪ MDU sells power generated through coal and gas it sells to its subsidiaries. It doesn't have to pay its subsidiaries for fuel it doesn't use. ▪ To the extent that Northwestern energy, MDU, and rural electric cooperatives can get revenue they otherwise would not have received because of distributed green energy generation and fuller use of substations and transmission lines, existing customers benefit because more use means more folks to pay for the line.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
13) What if we do not support renewables? How would a failure to support renewables affect existing customers who would prefer not to buy black electrons or contribute to global climate change and pollution?	▪ Consumers who continue to support the creation of new, poorly conceived, and unnecessary embedded costs force customers who wish to go a different route into paying for embedded costs of black electrons that they do not want to buy. Those costs will take years to pay off -- 34 years or more for coal -- making it much tougher financially to address the problems of global climate change and tougher to reduce green house gases released by fossil fuel burning because the money needed to do that will be tied up or it will be more costly to pay off ill-conceived plants in order to make the change to less fossil fuel in the generation mix.

Question	Answer
14) Doesn't Northwestern Energy already have a green energy product?	▪ Yes. However, it is not the same as GEBCO's green energy product. We hope competition will improve Northwestern's product. ▪ Northwestern sells green tags offered by the Bonneville Foundation. However those do not include an energy component. All Northwestern customers are buying are the environmental benefits. The power is produced mostly in Washington. ▪ GEBCO is planning to offer both energy and environmental benefits – Montana renewable energy for Montanans. That way when the price of black electrons rises above the price of green electrons, folks who choose green energy will see a price advantage as depicted in the following graph. ▪ 600 utilities in the US have green energy products. MDU is not one of them. And Northwestern Energy has done very little to market its product or make it as attractive as utilities who have marketed green power aggressively. **Energy Costs/kWh GEBCO v. "Clean" & Dirty Coal** **Assume: $0.0893/kWh power price, $0.02 to $0.05/kwh to sequester C02,** **$0.002 to $0.005/kwh to clean up mercury,** **$0.014/kwh to "firm" the wind** 

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
15) What happens when the wind doesn't blow?	▪ All CREBs projects are hooked to the grid. So when the wind does not blow the energy simply comes from the grid. GEBCO will arrange for that backup power, sometimes called ancillary or firming power. ▪ Wind is primarily an energy source intended to replace dirtier energy sources and sources with fuel and pollution control costs when cleaner wind or solar power is available. ▪ Utilities in New Mexico use conventional coal plants to "firm" wind. Sometimes it is firmed with other sources, water, geothermal, compressed air storage, for example. ▪ It is a myth that only natural gas fired generation "backs" wind. If they are built in Montana, new generation IGCC coal plants will be ideal for firming wind because they can be ramped up quickly.
16) Northwestern contends that it will have difficulty finding future ancillary power. How will the entry on the grid of GEBCO projects affect the ancillary power situation?	▪ The Northwest Wind Integration Action Plan, issued in March 2007 flatly states that the initial wind integration studies by 5 area utilities including Bonneville Power Administration "find no fundamental technical barriers to achieving the [NW Area Power Planning] Council's target of 6,000 MW of wind. It's a question of at what cost." ▪ Costs of wind integration range from $0.0037/kwh to $0.01172/kwh if 20% of the energy in the grid comes from wind. Even at the high outlier end of those estimates, GEBCO power will be competitive. ▪ GEBCO will not need to utilize the PSC's ancillary power tariff because it has written into SB 337 that it will procure ancillary services without having to depend on Northwestern to do it for GEBCO, as would be the case if GEBCO were selling power as a Qualified Facility (QF). Therefore, because Northwestern will not be providing ancillary power to GEBCO, the assertion that Northwestern is limited in its ability to obtain ancillary power is immaterial since it does not apply to the power we will be adding to they area power grid. ▪ As a co-op, GEBCO may have public power sources for ancillary power that are not available to the investor owned utilities that Northwestern obtains its ancillary power from. In addition, Elliot Mainzer of BPA has offered to bring stakeholders together to solve the ancillary power problem for both Northwestern and Montana wind developers. And there will be follow-up actions to the Wind Integration Action Plan addressing the issue. In addition, GEBCO is engaged in ongoing discussions with WAPA and Basin Electric exploring options for obtaining ancillary services and with a private firm exploring scheduling options. ▪ Since GEBCO can obtain ancillary power from sources other than Northwestern to provide load following, etc. for its two 10 MW projects, that leaves the available ancillary power for the 50 MW of QF (qualified facility) wind that the PSC has found the system can handle without detriment to existing Northwestern customers.

Question	Answer
17) What about interconnection agreements?	▪ Interconnection agreements are no problem. ▪ Section 1254 of the Federal Energy Policy Act of 2005 requires a utility to interconnect its customer's renewable energy equipment that meets IEEE Safety Standard 1547. ▪ The Ottertail Power Case requires utilities to wheel power across their lines for other utilities. ▪ The Public Utility Regulatory Act (PURPA) requires a utility to interconnect certain generators to its transmission grid. ▪ Also FERC Order 888 establishes open access transmission. ▪ If future GEBCO projects are smaller (for example entail the loaning of money to promote individuals owning solar collectors, or fuels for schools biomass cogeneration units), section 1251 of the Federal Energy Policy Act of 2005 required utilities to interconnect any customer with net metering. Anyone in Montana may net meter loads up to 50 kW.
18) What if the existing utility will not let you use its meters?	▪ The meters are a part of the distribution system that the customer has paid for. GEBCO customers would continue paying for the distribution system as part of the interconnection agreement. Or GEBCO could pay the utility for the remaining, undepreciated cost of the meter serving a customer. ▪ In the alternative GEBCO could install newer smart meters (and seek a reduction in the distribution cost tariff because it is not allowed to use the meters its customers have mostly paid for). Smart meters will help the utility keep its peak load down.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
19) How does electricity get to me?	▪ The best known model for one utility's use of another's facilities in a competitive market is where phone companies transmit messages across each other's lines and share revenue through settlement tariffs. ▪ From a legal point of view transmission and distribution of electrons from one utility's system to another's is pretty much taken care of because of the Federal Energy Regulatory Commission's Open Access Transmission Tariffs (OATTs), FERC Order 888; Sections 1251 and 1254 of the 2005 Federal Energy Policy Act; the Ottertail Power and Gregory Swecker cases, MCA 35-19-101 et seq., and federal and state PURPA laws. ▪ Northwestern now moves power from the Bonneville Power Administration to Southern Montana G & T which serves five Montana Cooperatives. The tariff cost Southern Montana pays to Northwestern for that is $0.00744/kwh for movement in the transmission grid. It may be that this FERC regulated charge is the charge that should be levied for this transmission service but it appears to be for point to point service and service to GEBCO customers encompasses the area wide transmission grid. ▪ The residential cost for movement of power in Northwestern's system is $0.008333 for transmission and $0.0259 for distribution. These amounts appear on Northwestern power bills. The higher residential cost transmission tariff may be more reflective of the actual costs to Northwestern of service to GEBCO customers because the delivery of energy is point to several points encompassing the entire transmission system. SB 337 envisions this and calls for a tariff to cover actual costs. ▪ The power generation costs from all NWE suppliers are now passed through to the customer without Northwestern making any money on the power itself. GEBCO power generation costs would be treated similarly even if billed through GEBCO. The distribution costs (i.e. revenues) to get the power to the ultimate customer are the same whether or not that power comes from PPL's coal facilities or our wind turbines. ▪ Northwestern would not be out anything from the transaction, since all it makes money on now is transmission and distribution. That is a result of its own choice to sell its generation facilities. ▪ On the other hand, Northwestern customers who would prefer to buy green electrons now will not be forced to pay for new coal generation. They will be able to purchase reliable, clean, renewable energy that carries with it no escalating fuel or pollution control cost. Once our windmills are paid for, the cost of providing truly clean energy will drop. ▪ That is, GEBCO's program is different from the "green tag" program offered by Northwestern because once our wind turbines are paid for (in about 16-17 years) our customers will be able to vote themselves a rate reduction to reflect that fact. That is not now possible under Northwestern's green tag program. This rebate is reflected in the chart accompanying item 14 above. MDU does not currently have a green tag program.

Question	Answer
20) Who will I get my power bill from?	▪ Sometimes a utility will bill for another utility if the two utilities have contracted for that to happen. However, GEBCO can also bill independently if a billing contract is not negotiated. ▪ The PSC has provided for the types of billing arrangements described above, any one of which will work for GEBCO customers.
21) What if there is a tornado? How will customers be served?	▪ GEBCO sophisticated spreadsheet has calculated a substantial amount ($79,000 over the life of a turbine) for insurance costs into its maintenance budget to protect against weather-related losses. These costs are in line with the costs for insurance for these turbines that is charged on the Buffalo Ridge in Minnesota. ▪ Properly negotiated construction contracts typically deal with the contractor insuring against the risk for construction related losses. ▪ Distributed wind and solar power generation has less of a chance of being completely wiped out than say a melt down of a nuclear plant or terrorist hit of a coal generating facility. ▪ Norway did see its first tornado ever last summer -- likely a result of global warming. Severe weather is a possibility for all utilities as we have seen during the aftermath of Katrina where fossil fuel caused global warming intensified a storm that left many without utility service. ▪ We can partially "self-insure" ourselves against more severe weather by reducing greenhouse gas emissions if we produce more power from renewable resources.
22) GEBCO is proposing small, 10 MW facilities which are less cost effective than larger projects. Is this a good business model?	▪ Despite some efficiency gained from large projects, small, community-based wind farms have important cost advantages over large wind development. ▪ A May 2005 US Dept of Energy study (http://www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/38154_econdev_compare_statewide.pdf) showed that wind power brings higher direct economic benefits to local economies than any other form of new electricity, including from coal and natural gas. ▪ A September 2004 US General Accounting Office study (http://www.gao.gov/new.items/d04756.pdf) found that local ownership of wind systems generates an average of 2.3 times more jobs and 3.1 times more local dollar impact compared to "out of area" interests. For example, a single 40 MW project built in Pipestone County, Minnesota, would generate about $650,000 in new income for the county annually. In contrast, 20 locally owned projects at 2 MW each (40 MW total) would generate about $3.3 million annually in the same county.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
23) Are there any safety concerns we need to worry about?	▪ When renewable energy started to be integrated on electric grids in the 1970s there was some concern that stray voltage on a line would endanger linemen working to fix a downed line. Much progress has been made since that time in developing industry standards. ▪ The main interconnection standard is American National Standard ANSI/IEEE Std 1547. Our windmills will comply. With the advent of computerization, they can sense when power is not going into the grid and shut down. In some cases, large windmills are being asked to provide ride through power in the event of grid problems to get the grid restored faster. Other safeguards are in place to protect utility workers where ride through is provided.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
24) Some say they will support SB 337 only if GEBCO changes its business model to sell power only as a qualified facility (QF). Why not do that?	▪ If GEBCO changed its business model to become a Qualified Facility (QF), selling power to the utility under QF tariffs, it would loose the ability to finance through Clean Renewable Energy Bonds and Montana would lose $32 million in clean energy. GEBCO is constrained by state law (35-19-201) to selling electricity to its members and only selling the excess on the wholesale market. ▪ If it were to become a QF, only selling power outside of the cooperative model, that would change GEBCO's ability to qualify for Clean Renewable Energy Bonds and to qualify for ancillary power from sources not available to investor owned utilities. Those supporting reregulation do not require the re-regulated monopolies to change their business models to become municipals or cooperative. Forcing Green Electricity Buying Cooperatives to a different business model would change the law GEBCO has relied on when incorporating, a law supported by a unanimous Montana Senate and by all but two members of the Montana House of Representatives. ▪ QF tariffs only pay about 4.15 cents/kwh for electricity (after subtracting the $0.0075 cost of ancillary power in the QF tariff order)--below what is needed in order to amortize the cost of new wind turbines in approximately 16 years under the zero-interest Clean Renewable Energy Bond financing rules. Refurbished turbines as proposed for the city/county projects could meet that price; however, there are not that many refurbished turbines around. ▪ The QF tariff is designed to work in conjunction with the 1.9 cent/kwh tax credit. Since GEBCO is a co-op it cannot use the tax credit to help make its projects work. Clean Renewable Energy Bonds were designed to work with entities like co-ops, tribes and governments that cannot use the tax credit to finance projects. ▪ If GEBCO becomes a QF that tends to erases the financial benefit of being a green power cooperative customer, namely that once the windmills are paid for the co-op members can vote themselves a customer rebate. ▪ The PSC does not have a tariff that says if people buy green power, they will not be charged for future increases in pollution control, carbon capture, or fuel cost increases (because people who buy green power do not add to any of those things.) ▪ Restricting GEBCO to being a QF would kill clean renewable energy bond financing. The cost of buying green energy will be greater for a few years until the costs curves cross as fuel and pollution control costs rise for black electrons. There is no way for the market to reflect that advantage outside of the cooperative model or tariffs that reflect the eventual cost advantage persons who are committed to keeping the Big Sky blue will eventually have if they pay more initially. ▪ GEBCO's entry into the QF market limits the ability of other producers to produce under the 50 MW ceiling the PSC has set before it reevaluates its order on power coming from qualified facilities. We think the more wind the better up to at least 20 percent renewable energy in the mix and have developed a model to facilitate that.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
25) What effect will GEBCO's two 10 MW projects have on existing customers of the monopolies?	▪ The PSC's December 19, 2006 Order No. 6501f, paragraph 190 in Docket D2005.6.103 indicates that if it restructures, the NWE will purchase approximately 10 to 30 percent of its resource needs from the short term market. ▪ Acquisition of 50 MW of new QF wind power would represent approximately 2% of NWE's projected load. The Order found "Thus NWE's ratepayers would not experience increased risk as a result of the QF rate option." ▪ GEBCO's 20 MW is far less than the 50 MW the PSC has already determined that the system can handle without risk to ratepayers. If the 50MW ceiling is approached as a result of windpower from different sources coming online, the Commission can reevaluate its tariff. ▪ It should not matter where the 50 MW of non-monopoly supplied renewable power comes from. To limit it to QFs illegally discriminates against green electricity buying cooperatives.
26) How do you address the assertion that total monopolization of the electric power supply is necessary because the monopolies need to plan for their load?	▪ Monopolization is not a guarantee of effective planning. The regulated and unregulated utility industry spent $100 billion to build 200 gigawatts of excess combined cycle natural gas plants that imploded as the over-building drove the price of natural gas up. ▪ GEBCO's projects will have a minimal effect on load planning. Even if fully re-regulated, NWE will still purchase 10 to 30 percent of its energy from the short term market, and it will purchase approximately 1.5% less on that market if GEBCO's projected projects enter the picture. ▪ Part of the monopoly planning for its load is to negotiate requirements only contracts that say it does not have to take power if there is no need for it. This would happen if a major industrial customer left the system for example. If that is not already done, the PSC would have authority to order that kind of requirements only procurement contract.
27) Specifically, how will GEBCO affect the ability of the monopolies to plan?	▪ If all of the Green Buying Cooperative's authorizations to issue CREBs are utilized, GEBCO will be providing 10 to 20 MW of non-QF power to NWE's system depending on how much is not used east of the Miles City intertie. This is far less than the 50 MW the PSC has already determined that the system can handle without risk to ratepayers. ▪ When the 50 MW of additional power from sources not in the monopoly's plan is reached, the PSC will reevaluate the limit set in Order No. 6501f. ▪ If the monopolies and others are worried about migration off their systems to other forms of power suppliers, they can always reevaluate their supply plans to better meet the needs of their customers.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

Question	Answer
28) How does NW Energy deal with the default supply if GEBCo goes out of business or if customers wish to go back to being served by the monopoly?	▪ The wind mills and the short term power market will still be there to serve customers. ▪ To the extent that NWE does not have to purchase power it would otherwise purchase for GEBCO customers, it slightly reduces the risk of market fluctuations. That is, the utility would only have to purchase 8.5 to 28.5 percent of its power in the 3-5 year market. If GEBCO ceases to exist, the utility would only have to resume purchasing what it otherwise would have purchased if GEBCO did not exist. And the benefit GEBCO will provide to existing utility customers by reducing their market risk goes away. No harm no foul. ▪ If this is a cost concern, the proper way to deal with it is for the PSC to establish the reintegration tariff called for in SB 337 for customers who wish to be reintegrated to the investor owned utility. Customers would know of their cost risk of leaving NWE prior to making the switch to co-op provided green power.
29) Some would say there is an essential conflict with the Green Buying Cooperative approach and this year's theme of re-regulating utilities.	▪ A regulated monopoly can exist side by side with a green buying and generating cooperative. We know this because there is a well tested model other than a regulated monopoly model that shuts green buying cooperatives and others out of the market. For example, the telecommunications industry is regulated and partially regulated and yet allows for competition. The reregulation legislation can provide for a similar model. GEBCO's Executive Director has testified for reregulation without pre-approval provisions and without provisions restricting customers who choose to obtain a product the monopoly does not provide. ▪ The Green Buying Co-op approach is consistent with the time-honored Teddy Roosevelt Republican and New Deal Democrat approach of limiting monopoly power; ▪ It is consistent with the principle that Montanans can help each other by producing our own energy while keeping the Big Sky blue; ▪ In all important respects, it is consistent with the PSC statement that "The most desirable result would be a diverse mix of new, small QF resources (e.g., small hydro, biomass, cogeneration, wind)." Whether those new, small, distributed sources are QF or green buying cooperative-owned will not effect the rates of those who still want mostly dirty electrons; and ▪ Consistent with the principle that we would rather not pay exorbitant prices to out of state energy producers who have in the past hornswoggled the watchdogs.

30) The wind blows at night when nobody needs it.	▪ Wind power generation can displace fossil fuel use at night as well as during other time periods. ▪ Wind can be used in pump storage, compressed air and hydrogen production during times when the wind is strong and demand for electricity is small. ▪ At 8 pm on January 12, 2007 Danish wind turbines produced 58% of total Danish consumption or 2725 MW of a 4735 MW load. ▪ There are 3,100 MW of Danish wind turbines on line. Danish turbines produced 88% of their capacity during peak evening load. ▪ Danish wind turbines were producing nearly as much as the central station plants. ▪ New Energy reports (2/2006) that on 16 February, 2006 during the peak of consumption in Spain at 9:25 pm, Spanish wind turbines delivered 20% of total generation. This was during a period of low hydroelectric production because of a prolonged drought. At the time there were 10,200 MW of wind generation on line-and most significantly-they were producing 7,000 MW or some 70% of their nameplate capacity. ▪ This debunks charges that wind turbines never deliver their capacity when it's needed most-during periods of peak consumption. ▪ Moreover, this wasn't the result of an academic study on one or two wind turbines, but on a fleet of machines scattered across a nation of 40 million people that consumes 250 TWh of electricity per year.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

31) Is wind energy more heavily subsidized than other forms of energy?	▪ Wind energy currently receives a direct subsidy, the Production Tax Credit (PTC). The PTC provides a tax credit of 1.5 cents per kilowatt-hour (adjusted for inflation, currently 1.9 cents) to the producer of electricity from wind energy. The PTC was an acknowledgement that wind energy can play an important role in the nation's energy mix. It was also a recognition that the federal energy tax code favors established, conventional energy technologies. The PTC currently is scheduled to expire December 31, 2008. ▪ CREBs funding costs taxpayers about half as much as the Production Tax Credit, rapid depreciation type of wind turbine financing. ▪ All energy technologies are subsidized by the U.S. taxpayer. Subsidies come in various forms, including payment for production, tax deductions, guarantees, and leasing of public lands at below-market prices. Subsidies can also be provided indirectly, for example through federal research and development programs, and provisions in federal legislation and regulations. Loopholes in the Clean Air Act currently exempt older power plants from compliance with federal pollution standards and become, in effect, a subsidy that lowers the price of electricity from coal-fired power plants. ▪ Here are some conclusions from a detailed 1993 study of energy subsidies by the Alliance to Save Energy (Federal Energy Subsidies: Energy, Environmental, and Fiscal Impacts): ▪ "Energy subsidies in 1989 favored mature, conventional energy supply resources by $32.3 billion to $3.8 billion over non-conventional energy resources." ($21 billion went to fossil fuels, $11 billion to nuclear, and $900 million to all renewable energy sources including wind.) "There is currently no free market in energy. Given the size of federal energy subsidies, now and in the past, it is erroneous to speak of a 'free market' in energy.... [T]he mature, conventional technologies received almost 90% of the subsidies."
32) Are GEBCO's bylaws on the Secretary of State's web site?	▪ Articles of Incorporation are on file with the Secretary of State. Filing of by-laws is optional. GEBCO's bylaws have been posted for quite some time on our web site at http://www.greenelectricitycoop.org/about%20Co-op%20bylaws.htm
33) Will green Power from GEBCO will be more expensive?	▪ Consumers join GEBCO voluntarily. So while green power from GEBCO will be more expensive to start with, GEBCO customers will be incurring the extra expense to buy a product not now available from local investor owned monopolies. And as indicated in the graph associated with item 14, the cost curves for dirty electrons and green electrons will cross in about eight years, making green power less expensive. ▪ Pay more voluntarily, you get more, namely energy that does not spew pollution into the big sky or more mercury into the human birth process; you get a product that does not add to global warming.

34) GEBCO will take MDU customers.	▪ Montana Dakota Utilities currently does not have a green power product. Its conservation efforts lag far behind what other US utilities do in their web sites, bill stuffers, and other advertising. ▪ Telecommunications utilities have dealt with customer migration for decades. Electric utilities can too.
35) GEBCO does not have enough experience.	▪ The experience of GEBCO Board members has been listed for more than a year on our web site. ▪ When GEBCO president Pat Dopler was a city councilman he did not have to be an engineer to hire competent people to build sewers and roads. ▪ GEBCO recognized early on that it would need experienced persons involved in its projects. That is why we contracted with the most experienced investment bankers in the US as is set forth in the answer to question 3. ▪ GEBCO's Board has voted to continue its relationship with engineer Dave Ryan and Windpark Solutions. Windpark Solutions was the initial developers of the Judith Gap wind farm. Mr. Ryan was an engineer for Montana Power. Other qualified Montana engineers exist including Matney & France in Bozeman, and ECI in Billings. Also, per its project management schedule, GEBCO has met with or received information from contractors involved in several wind projects including Judith Gap. In accordance with its policy of giving everyone a piece of the clean energy boom, GEBCO will be contracting with different engineers and union contractors for its other projects. ▪ GEBCO has already made contact with several necessary unions to insure that it obtains quality labor on its projects. ▪ GEBCO has its eye on other young, talented Montanan's whom it will consider to fulfill positions as that becomes necessary, including, if he is not otherwise occupied, Little Elk Glenn, a Crow Indian who has completed a post graduate internship with Amory Lovins at the Rocky Mountain Institute.
36) GEBCO's legal plan is flawed.	▪ GEBCO followed the electricity buying cooperative enabling legislation to a tee. That legal entity was approved by all but two legislators when it passed in 1999. ▪ SB 337 opponents indicated that HB 330 proponents had their legal act together and GEBCO didn't. As the answer to question 3 indicates GEBCO's financial advisor uses the same bond council that HB 330 proponents use. ▪ We respectfully submit that the monopolies legal plans that balk at providing required transmission and distribution services are flawed because they violate federal and state statutory law and federal case law.
37) What interconnection standards will be met	▪ The monopoly sets the interconnection standards. In that regard the standards are the same as for any electric generation facility of that size. GEBCO buys the interconnection equipment. See Questions 17 & 23

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

38) The PSC is concerned that if customers leave the base of the monopolies, the remaining customers will have to suck up the costs of the system. What about that?	▪ Nobody will be leaving the transmission or distribution systems and the charges for those will be the same. ▪ Northwestern currently has no generation in the rate that would be a stranded cost because it sold the generation to make a profit and were not worried about the effect that had on its customers. ▪ MDU has not had a rate case in decades and it is likely that the lion's share of its generation system has already been depreciated so there would be little stranded costs there. To the extent that the load leaving the system is offset by load coming on the system, those costs can be picked up by new entries to its system. If those do not match, the commission can establish an exit tariff that would protect existing customers or that can be assumed by the stockholders as a business risk because their monopoly did not offer a product that the customers wanted. SB 337 was amended to provide for such a tariff. However, upon a second review after the amendment, the code commissioner's determination that the single subject rule did not allow that amendment to SB 337. At present, 69-8-201(5) would allow the PSC to promulgate a reentry tariff. However, that provision is deleted in HB 25, which is working its way through the legislature. GEBCO intends to seek reentry and exit tariffs if law allows that.
39) The PSC believes that it is not so much that each one leaving and returning to the system is problematic; it is that they start to add up.	▪ The way to handle people coming on and off the system is not to limit competition; it is to establish fair, non-discriminatory, cost-based exit and reentry tariffs for each customer class, residential, and small business. GEBCO intends to seek reentry and exit tariffs if law allows that.
40) The PSC believes that even if reintegration of the monopoly does not occur, it will be necessary to limit competition with the monopoly because they have to go get contracts.	▪ The PSC has authority to order the utility to include clauses in its energy procurement contracts that say if the utility's load decreases, there is no obligation to take energy. The utility likely has that kind of clause in its purchase contracts already to protect it against having to buy power if a large customer goes out of business.

Green Electricity Buying Cooperative Authority to own windmills, SB 337.

41) It has been said that ancillary services are hour to hour and regulating reserves are what you can call up within seconds.	▪ Ancillary services do cover hour to hour and day ahead (regulating) reserves. However, to clarify, they also cover other things as set forth in Montana law. In the Western Area Power Administration's tariff, pp. 53 - 58 they cover scheduling system control and dispatch service, reactive supply and voltage control from generation sources service, regulation and frequency response service, energy imbalance service, operating reserve - spinning reserve service, and operating reserve - supplemental reserve service.
42) It has been said that GEBCO has not included any maintenance costs. Is that correct?	▪ $439,657 in maintenance costs per 2.1 MW windmill have been included in GEBCO's O & M budget over the 25 year design life of a windmill. In addition, $730,000 has been included to maintain the warranty throughout that period. ▪ The $1000 spread sheet that GEBCO bought to analyze its projects sets forth all costs necessary to construct and maintain a wind farm. It has been used for several successful community wind projects on Minnesota's Buffalo Ridge. ▪ The maintenance costs were included as part of the proprietary $31.7 million Clean Renewable Energy Bond application GEBCO made to the IRS. To our knowledge, no opponent of SB 337 has asked for or been shown that proprietary information.
43) An example was given that Northwestern originally had 60 MW of ancillary power that was cheaper than the most recent two purchases of ancillary power.	▪ True, however, it should have been made clear that the 60 MW of ancillary power was for the pre-Judith Gap system. The next two purchases totaling 25 MW (a span of plus or minus 12 ½ MW was to accommodate 130 MW of wind generation at Judith Gap). Northwestern originally bought plus or minus 7 ½ and then bought more when it was not meeting the VARs standard. We need NWE's engineering reports as to how much ancillary power would be needed for Judith Gap to determine whether or not the utility followed the recommendations of its own engineers or the industry standard. If Northwestern did not follow its own engineering recommendations or industry standards of 10 to 15% ancillary power, it should be no surprise that the utility has had some difficulty in balancing the system. Rather, properly investigated, the blame may be placed at the feet of the power purchase plan (or those who did not follow it) within the monopoly rather than with the dispatchers or the difficulty in integrating wind. ▪ While ancillary power costs increase, the amount of cost increases over time would not be able to be properly evaluated unless information were given as to when the original ancillary cost contract was negotiated as compared to the contract for Judith Gap. ▪ Even with the extra purchases the cost of load following and regulation power at Judith Gap appears to be no more than 65/100 of a penny per kWh (6.5 mills) for a total cost of new wind into its system of under 4.9 cents/kwh.

44) How long will GEBCO have to pay off bonds?	▪ That is governed by the IRS and the time period is set at the time of issuance. Various bonding authorities have estimated between 12 to 18 years. The time period on March 21, 2007 was 16 years. The credit rates and time period may be found at https://www.treasurydirect.gov/SZ/SPESRates?type=CREBS Because of bridge financing issues, the entire cost of the project may be paid off in a period a bit longer than 16 years. That is, the bonds will be let before income flows to the project and bridge financing will have to be arranged for that.

45) Why does GEBCO need to make loans to customers?	▪ This loan provision has been amended out of SB 337 because the authority is already implied in the existing law and because GEBCO can work with existing lending agencies to accomplish any needed loans for its customers. Loans would be needed primarily to fund energy conservation and renewable energy projects. GEBCO is a green buying cooperative empower by statute to carry out energy conservation projects as well as renewable energy. ▪ Regular utilities have authority to fund conservation or the buying of various energy use products. GEBCO will utilize existing law to do that as well to aid in energy conservation purchases.